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AUTHOR Snow, Marguerite Ann; Brinton, Donna M.
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ABSTRACT

The adjunct model of language instruction is described as it has been implemented at the University of California at Los Angeles (UCLA). In this model, freshman English and English-as-a-second-language (ESL) courses are linked with content area courses to better integrate the reading, writing, and study skills required for academic success at the university. The report presents a rationale for the adjunct model and describes the key features of the UCLA Freshman Summer Program. It also presents the findings of three studies carried out in the UCLA freshman program: (1) former students' evaluation of the program; (2) an assessment of the home background and high school preparation of the 1986 participants and of their self-assessment of academic skills; and (3) follow-up interviews with selected ESL students and the results of a simulated examination comparing the progress of program participants with that of non-participants. (Author/MSE)

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THE ADJUNCT MODEL OF LANGUAGE INSTRUCTION: INTEGRATING LANGUAGE AND CONTENT AT THE UNIVERSITY

Marguerite Ann Snow and Donna M. Brinton
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Center for Language Education and Research
University of California, Los Angeles
1988

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For further information contact:

Amado M. Padilla, Director
Center for Language Education and Research
1100 Glendon Avenue, Suite #1740
Los Angeles, CA 90024

THE ADJUNCT MODEL OF LANGUAGE INSTRUCTION: INTEGRATING LANGUAGE AND CONTENT AT THE UNIVERSITY

Marguerite Ann Snow and Donna M. Brinton

University of California, Los Angeles

ABSTRACT

This report describes the adjunct model of language instruction. It is a model in which English/ESL courses are linked with content courses to better integrate the reading, writing, and study skills required for academic success in the university setting. The first section of the report provides a rationale for the adjunct model and describes key features of the UCLA Freshman Summer Program (FSP). It also presents the findings of three studies carried out in the Freshman Summer Program (FSP) at UCLA: (1) former students' evaluation of the program; (2) assessment of home background, high school preparation, and self-assessment of academic skills of the 1986 students; (3) follow-up interviews with selected ESL students and results of a simulated examination comparing the FSP follow-up students and non-FSP ESL students.

THE ADJUNCT MODEL OF LANGUAGE INSTRUCTION: INTEGRATING LANGUAGE AND CONTENT AT THE UNIVERSITY

The nation's colleges and universities are faced with the mounting question of how to educate the steady stream of underprepared students entering higher education. These incoming students, both from language majority and language minority backgrounds, enter the university lacking the essential skills required to succeed academically. For language majority students, the lack of skills required to synthesize lecture and text material, and to express this information in writing assignments and examinations, hinders their progress at the university. For language minority students, these problems are even more pronounced. In addition to being inexperienced in academic skills, language minority students may be less proficient in English, therefore further limiting their potential for university success.

This report examines the Freshman Summer Program (FSP), a seven week intensive program which was established at UCLA in 1977 to bridge the gap between high school and college. The primary academic goal of FSP is to introduce underprepared incoming freshman to the academic rigors of the university. Equally important goals of FSP are to provide students with the social and recreational needs important during this transition period, to build positive self-images, and to insure emotional stability throughout the program. The primary goal is achieved through FSP's academic component; the latter goals are accomplished through the program's on-campus residential program, academic and personal counseling services, forums and social programs, and tutorial services.

This report is divided into four sections. The first section presents a rationale for the adjunct model. The second section provides a brief description of the instructional model employed in FSP including key features of the academic component and student population. The third section of the report presents the results of three studies which were undertaken to examine the effectiveness of the adjunct model and to document whether students transferred the skills learned in FSP to courses they took during the regular school year. The final section provides a critique of the adjunct model,

pointing out its strengths and potential breakdowns. The applicability of this model to other instructional settings is also discussed.

Rationale for the Adjunct Model

In the past few years, there has been growing interest in content-based approaches to the teaching of second and foreign languages at the elementary and secondary levels (Willetts, 1986). This report describes the adjunct model, an example of a content-based model implemented in the university context which capitalizes on the disciplinary links available in a university setting. In an adjunct program, students are concurrently enrolled in two coordinated courses--a language course and a content course. The two courses are linked by the shared content base, and instructors complement each other with mutually coordinated assignments. In this way, the reading, writing, and cognitive skills required of the content course become integrated into the language curriculum.

The rationale for the adjunct model used in FSP is articulated in the theoretical underpinnings of at least three movements in language teaching. The first, the "Language Across the Curriculum" (Bullock Report, 1975) movement, originated in Britain and has been developed for use with native English speakers. A basic tenet of this movement is that effective language teaching must cross over all subject matter domains. The perspective taken is a reciprocal relationship between language and content. Students must be given opportunities to "learn to write" and to "learn to read", but must also be allowed to "write to learn" and to "read to learn" in order to fully participate in the educational process.

A second rationale for the adjunct model used in FSP can be found in the English as a Second Language (ESL) literature, specifically in the English for Special Purposes (ESP) literature. Widdowson (1983) noted:

> In ESP we are dealing with students for whom the learning of English is auxiliary to some other professional or academic purpose. It is clearly a means for achieving something else and is not an end in itself... This being so, ESP is (or ought

> logically to be) integrally linked with areas of activity (academic, vocational, professional) which have already been defined and which represent the learners' aspirations (pp. 108-109).

Elsewhere, Widdowson (1978) advocates integrating or linking language teaching in the schools with other subjects (e.g., physics, chemistry, biology, map drawing) "as this not only helps ensure the link with reality and the pupils' own experience, but also provides us with the most certain means of teaching language as communication, as use rather than simply as usage" (p. 16). Thus, integrated or content-based instruction represents a curricular innovation in keeping with the current learning across the curriculum movement at the secondary level in American schools (cf. Anderson, Eisenberg, Holland, Wiener, & Rivera-Kron, 1983) and the extensive work in ESP.

The third rationale for the adjunct model comes from perhaps the most documented model of content-based language instruction: immersion education. In immersion programs, monolingual English-speaking children at the elementary and secondary levels receive the majority of the standard school curriculum in the second language. Begun in Montreal in 1965, this model of foreign language teaching has since spread throughout Canada and the United States. The successes of immersion with language majority students have been repeated in a number of different target languages (e.g., French, Spanish, German, Cantonese) and in a variety of ethnolinguistic settings (Rhodes & Schreibstein, 1983).

While the three movements discussed above differ in their implementation of content-based curricula and in their target populations, they share the same basic pedagogical assumption: successful language learning occurs when students are exposed to content material presented in meaningful, contextualized form, with the focus on acquiring information. Moreover, the approaches represent an effective method of integrating the language curriculum--whether for native, second, or foreign language speakers--with the academic or occupational interests of the students.

Description of the UCLA Freshman Summer Program

Academic Component

The academic component of FSP consists of the various ESL/English composition courses and six content courses: Anthropology, Computer Science, Geography, Political Science, Psychology, and Social Science. These introductory-level courses are typical of those which undergraduates take to fulfill their general educational requirements at the university. Students attend 12-14 hours of language classes weekly, while the combined lecture/discussion section format of the content course comprises approximately eight contact hours per week. Course content in both the language and subject-matter classes parallels that of courses offered during the normal academic year, with minor modifications made to facilitate coordination between the two disciplines. The academic component of FSP is graphically displayed in Figure 1.

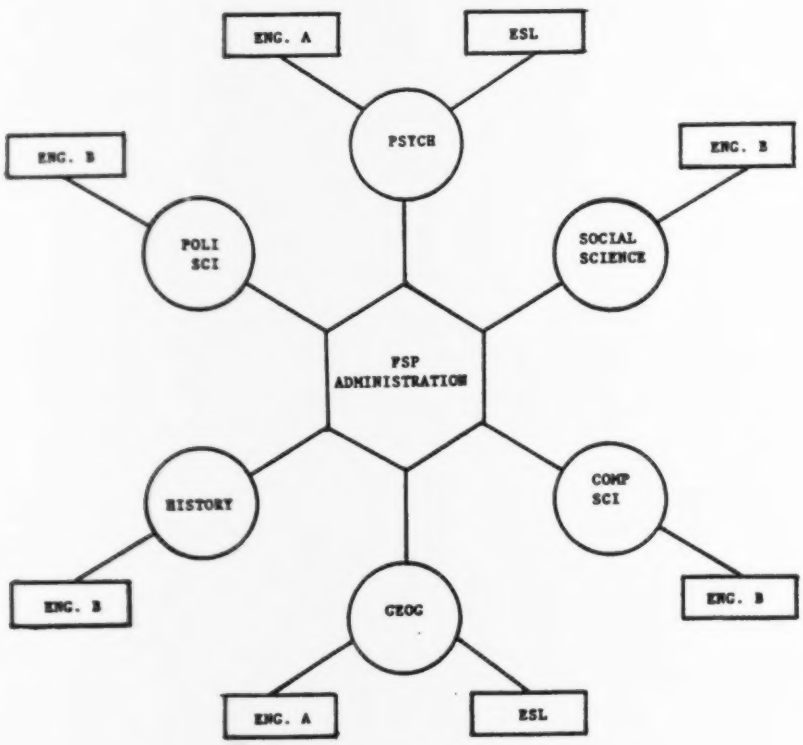

Figure 1: The Academic Component of the UCLA Freshman Summer Program

Student Population

Every summer, approximately 700 incoming freshman students are invited to attend FSP. Acceptance at UCLA is not generally contingent on participation in FSP; however, those initially contacted are encouraged to attend. The participants primarily consist of low income, ethnic minority, or linguistic minority students who come from high schools in the greater Los Angeles metropolitan area. The bulk of the ESL students are Asian immigrants who completed their secondary education in the United States. The majority of the students are regularly-admitted students, that is, they meet the general University of California admission requirements. They are routed into FSP, typically, because they applied to UCLA as affirmative action students or received SAT verbal scores below 300.

All prospective FSP students who accept the invitation to participate in the program take the University of California Subject A Exam. The placement exam consists of an essay which is holistically rated by a team of trained raters to place all incoming University of California students into courses which fulfill the composition requirements. During the rating procedure, student essays which exhibit ESL "markers" (e.g., lack of articles, incorrect word forms, etc.) are flagged and the earmarked students are required to take the UCLA English as a Second Language Placement Exam (ESLPE). Based on their Subject A placement score or their ESLPE results, students are tracked into the parallel sequences of native speaker or ESL courses. Thus, lower proficiency students are placed into English A/ESL 33B, while intermediate level students are placed into English 1/ESL 3C. None of these courses satisfies the UCLA Composition requirement.

Summary

Since 1977, there has been extensive work in the design and implementation of the adjunct model in the UCLA Freshman Summer Program. However, little formal research has been conducted to document the effectiveness of the model. The previously collected data consisted mainly of some student background information, student program evaluations, and individual course/teacher evaluations. The purpose of the three studies in this research project, therefore, was

to build on the existing data base and to attempt a more comprehensive examination of the ESL component of FSP.

Study 1: Student Profile and Retrospective Evaluation of FSP

Since little follow-up had been conducted on the former ESL students who had participated in FSP, the first study sought to locate former participants and to collect data on their academic performance while attending UCLA. Further, this study included a reanalysis of the existing program evaluation data as well as a retrospective evaluation of FSP. The research questions for this study were as follows:

1. What was the profile of former ESL students who had participated in FSP from 1981-1985 (e.g., major, GPA, persistence at the university)?
2. How did the former ESL participants in FSP value the seven-week summer program immediately after completing the course?
3. What was the former ESL students' retrospective evaluation of FSP after they had taken regular courses during other school years?

Methodology

Subjects. Subjects for Study 1 were 224 students enrolled in the ESL track of FSP during the summers of 1981-1985. These students had been enrolled in ESL 33B or ESL 33C during FSP. As discussed earlier, the majority of these students were Asian immigrants, and were incoming freshmen at the time they attended FSP.

Instruments. Two instruments were used to collect follow-up information about the former ESL students in FSP. The first instrument was the FSP course evaluation. This instrument was developed by the FSP administration, and was administered at the conclusion of the term every summer. It asked the students to rate the overall effectiveness of FSP and to evaluate its individual components. For the purposes of this study, only selected items on the language course evaluation forms were included. For example, the items asking students to rate their individual instructors were omitted.

The second instrument was designed by the researchers to follow-up these former students. This questionnaire contained three sections. The first section asked the students to supply current demographic information such as year of FSP participation, adjunct courses

attended, birthplace, home language, current address, present occupation/student status, and major field of study. The second part of the questionnaire asked the students to rate the usefulness of certain academic activities or skills they were exposed to in the FSP curriculum--for example, time management techniques, in-class essay exam strategies, "psyching out" (or second-guessing) the professor, and preparing reading guides. In addition, students were asked to rate the more global benefits of FSP, namely, their adjustment to UCLA, their increase in self-confidence, and their ability to use UCLA facilities and resources. The third part of the questionnaire required students to estimate the amount of actual writing they had to do per quarter. In the final section of the questionnaire, students were asked to write open-ended comments on two questions. The first question asked students to comment on "the single most important thing [they had] learned in FSP." The second question asked for any other comments the students had about their experiences dealing with the language and academic demands at UCLA.

Procedure. With the cooperation of the UCLA Office of Student Preparatory Programs, records of the 224 ESL students were obtained. These records contained information such as the students' cumulative GPA, major fields of study, ethnic background, and current status (e.g., continuing student, graduated student). The FSP administration made available the relevant program evaluation data, which were subsequently reanalyzed for this study.

The questionnaires were mailed to the 224 former ESL students for whom addresses were available. Of these, 25 were returned as undeliverable, netting a target sample of 199. After two mailings, 79 (39.7%) were completed and returned.

Results

Student Profile. The records of the 224 former ESL students from the Office of Student Preparatory Programs provided a profile of the students. The vast majority were Asian immigrants, mainly from Korean (31%), Chinese (28%), Other Asian (26%), Philippine (4.5%), and Japanese (0.9%) backgrounds. Five students were Latino (2.2%) and ten students were Mexican American (4.5%). Four students were White (1.8%) and 4 students checked Other (1.8%). Of the 224, 150 (67%) were

permanent residents of the United States; another 69 (31%) were U.S. Citizens. Three reported having business visas (1.3%) and one had an F1 student visa (0.4%). There was only one student in the sample with refugee visa status (0.4%).

The majority of the students were enrolled in science majors at UCLA. For example, 44 (19.8%) were Math/Computer Science majors; 30 (13.4%) were Engineering majors; 26 (11.6%) were Biology majors; 15 (6.7%) were Chemistry majors; and 9 (4%) were Physics majors. The rest of the students had declared majors in a variety of fields. Economics ($\underline{n}$ = 20) and Spanish ($\underline{n}$ = 3) led the list, with other majors having only one or two students each. The cumulative mean UCLA GPA for the 224 students in this study was 2.66 ($\underline{sd}$ = .57) at the time the information was obtained from the Office of Student Preparatory Programs. Only 15 of the 224 students (6.7%) had withdrawn or been dismissed from UCLA at the time this information was compiled (May, 1986).

End-of-Summer Program Evaluation. Responses to selected items on the FSP course evaluation are displayed in Tables 1 and 2, corresponding to the two major sections of the course evaluation instrument. Responses were available for summer terms 1981-1986; however, since there were no ESL sections in 1984, student responses for this year are not reported. Note also that responses for all FSP participants (native speakers and ESL students) are displayed. In this way, it is possible to compare the responses of the two language groups.

In general, all participants across the three years consistently rated FSP very highly (see Table 1). The majority of the FSP students agreed that they were better writers as a result of FSP (Question #1). Students in the 1985 group were especially positive about their development as writers. Likewise, students from all three years indicated that the FSP language adjunct helped them read their content course texts more effectively (Question #2), although the 1985 group rated the reading component much lower than the other two groups did. Finally, students' ratings of the assistance the language component provided their breadth course writing (Question #3) were uniformly high for all students in all years. Given the heavy reading load of the

Table 1

FSP Course Evaluation--Part A

Selected Students' Ratings of Language Component

		%agree			%disagree		
		83	85	86	83	85	86
Item #1	ESL(33B)	93.9	--	83.3	3.0	--	16.7
I am a better	ESL(33C)	62.3	85.0	100.0	9.4	5.0	0.0
writer than	ENG(A)	69.4	91.4	68.0	11.1	3.3	10.7
when I entered	ENG(1)	63.4	84.7	49.2	13.2	5.0	18.2
FSP	All FSP	67.4	86.9	54.0	11.3	4.4	16.5
Item #2	ESL(33B)	97.0	--	100.0	0.0	--	0.0
This course	ESL(33C)	88.7	90.0	92.3	1.9	0.0	0.0
helped me to	ENG(A)	90.8	92.7	89.3	1.9	3.3	5.4
write better	ENG(1)	88.8	82.6	85.3	1.5	3.2	5.4
for my breadth course	All FSP	90.0	86.3	86.6	1.5	3.1	4.5
Item 3	ESL(33B)	81.8	--	83.3	0.0	--	0.0
This course	ESL(33C)	75.5	60.0	61.5	3.8	0.0	0.0
helped me to	ENG(A)	76.9	89.7	96.0	7.4	3.3	4.0
read my breadth	ENG(1)	70.3	63.3	86.8	8.3	9.3	1.6
course text more effectively	All FSP	73.7	64.2	89.2	6.8	8.6	2.0

Note. Percent of "No Opinion" and missing data were deleted from tabled amounts. N's for 1983, 1985, and 1986, for each subgroup of students, respectively, were as follows: ESL-33B (33, not available, 6), ESL-33C (53, 20, 13), ENG-A (108, 151, 75), ENG-1 (205, 281, 258), and All FSP (399, 452, 352).

Table 2

FSP Course Evaluation--Part B

Students' Ratings of Language Component

	% Helpful			% So-So			% Not Helpful		
	83	85	86	83	85	86	83	85	86
Written Comments on Papers									
ESL(33B)	97.0	--	100.0	0.0	--	0.0	0.0	--	0.0
ESL(33C)	90.6	95.0	92.3	3.8	0.0	7.7	0.0	0.0	0.0
ENG(A)	93.5	94.7	94.7	2.8	2.7	2.7	0.0	0.0	0.0
ENG(1)	97.1	93.2	94.6	2.9	3.6	3.1	0.0	1.1	0.4
ALL FSP	85.2	93.8	94.6	2.8	3.1	3.1	0.0	0.7	0.3
Class Discussion									
ESL(33B)	90.9	--	100.0	9.1	--	0.0	0.0	--	0.0
ESL(33C)	75.5	90.0	76.9	17.0	5.0	15.4	1.9	0.0	0.0
ENG(A)	82.4	86.1	80.0	15.7	11.3	13.3	0.0	0.7	2.7
ENG(1)	92.2	84.0	87.2	7.3	10.3	10.9	0.0	2.9	0.8
ALL FSP	87.2	85.0	85.5	11.0	10.4	11.4	0.3	2.0	1.1
Presentations of other Students									
ESL(33B)	54.5	--	83.3	39.4	--	0.0	0.0	--	0.0
ESL(33C)	34.0	75.0	15.4	41.5	20.0	38.5	7.6	0.0	0.0
ENG(A)	51.9	24.5	40.0	26.9	19.2	13.3	6.5	4.0	4.0
ENG(1)	42.9	39.9	40.3	20.0	16.4	19.8	3.4	4.3	3.9
ALL FSP	45.1	36.3	40.1	26.3	17.5	18.8	4.5	4.0	3.7
Lectures on Grammar, Style, etc.									
ESL(33B)	87.9	--	100.0	3.0	--	0.0	3.0	--	0.0
ESL(33C)	90.6	90.0	76.9	3.8	5.0	23.1	0.0	0.0	0.0
ENG(A)	89.8	83.4	81.3	7.4	9.9	4.0	0.0	2.0	2.7
ENG(1)	91.2	68.3	66.3	6.8	11.4	15.5	1.5	1.8	1.2
ALL FSP	90.5	74.3	70.5	6.3	10.6	13.1	1.0	1.8	1.4
Small Peer Editing Groups									
ESL(33B)	60.6	--	66.7	27.3	--	33.3	6.1	--	0.0
ESL(33C)	52.8	50.0	61.5	20.8	25.0	30.8	7.6	5.0	0.0
ENG(A)	59.3	60.9	46.7	23.2	19.9	16.0	6.5	8.6	2.7
ENG(1)	55.1	62.6	62.8	16.6	18.2	18.6	9.8	8.9	12.8
ALL FSP	56.4	61.4	59.4	19.8	19.0	18.8	8.3	8.6	9.9

(Continued on next page)

	% Helpful			% So-So			% Not Helpful		
	83	85	86	83	85	86	83	85	86
Grammar Exercises									
ESL(33B)	100.0	--	100.0	0.0	--	0.0	0.0	--	0.0
ESL(33C)	84.9	95.0	69.2	5.7	0.0	23.1	1.9	0.0	7.7
ENG(A)	77.8	62.3	72.0	13.9	21.2	12.0	3.7	6.0	1.3
ENG(1)	74.6	41.6	44.2	18.5	17.8	15.1	2.0	1.8	6.2
ALL FSP	79.0	50.9	52.0	14.0	18.1	14.5	2.3	3.1	5.1
In-Class Writing									
ESL(33B)	93.9	--	100.0	0.0	--	0.0	3.0	--	0.0
ESL(33C)	79.2	90.0	76.9	11.3	5.0	15.4	0.0	0.0	0.0
ENG(A)	94.4	91.4	82.7	3.7	5.3	10.7	0.0	0.7	1.3
ENG(1)	90.7	89.0	86.4	5.4	4.6	7.8	2.0	0.7	1.2
ALL FSP	90.5	89.8	85.5	5.3	4.9	8.5	1.3	0.7	1.1
Take home Writing Assignments									
ESL(33B)	90.9	--	100.0	6.1	--	0.0	0.0	--	0.0
ESL(33C)	79.3	95.0	84.6	9.4	0.0	0.0	1.9	0.0	0.0
ENG(A)	73.2	86.8	85.3	8.3	6.0	5.3	2.8	2.7	0.0
ENG(1)	53.7	86.8	82.6	13.7	5.3	3.9	1.5	0.4	0.4
ALL FSP	65.4	87.2	83.5	11.0	5.3	4.0	1.8	1.1	0.3
Discussions of Study Skills and Reading Skills									
ESL(33B)	84.9	--	100.0	12.1	--	0.0	3.0	--	0.0
ESL(33C)	79.3	75.0	53.9	13.2	15.0	23.1	0.0	0.0	7.7
ENG(A)	79.6	76.2	73.3	11.1	9.9	14.7	5.6	2.0	2.7
ENG(1)	70.3	66.9	66.3	17.1	13.5	15.9	2.4	0.4	1.2
ALL FSP	75.2	70.4	67.9	14.5	12.4	15.6	3.0	0.9	1.7
Individual Conferences with the Teacher									
ESL(33B)	45.5	--	66.7	18.2	--	0.0	3.0	--	0.0
ESL(33C)	67.9	80.0	69.2	11.3	5.0	7.7	0.0	0.0	7.7
ENG(A)	69.4	78.1	68.0	0.9	10.6	8.0	1.9	2.6	0.0
ENG(1)	65.4	50.9	56.2	9.8	12.8	10.5	1.0	1.8	3.9
ALL FSP	65.2	61.3	59.4	8.3	11.7	9.7	1.3	2.0	3.1

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	% Helpful			% So-So			% Not Helpful		
	83	85	86	83	85	86	83	85	86
Writing Assignments Not Connected with Content Course									
ESL(33B)	18.2	--	83.3	6.1	--	0.0	9.1	--	0.0
ESL(33C)	60.4	80.0	76.9	20.8	0.0	15.4	5.7	0.0	0.0
ENG(A)	64.8	62.9	72.0	13.0	17.9	9.3	2.8	2.7	4.0
ENG(1)	64.4	60.1	67.8	15.1	15.0	9.7	0.0	2.1	2.7
ALL FSP	60.2	62.0	69.3	14.5	15.3	9.7	2.3	2.2	2.8
Writing Assignments Connected with Content Course									
ESL(33B)	84.9	--	100.0	6.1	--	0.0	6.1	--	0.0
ESL(33C)	69.8	90.0	84.6	15.1	5.0	7.7	0.0	0.0	0.0
ENG(A)	88.9	80.1	89.3	3.7	10.6	4.0	0.9	0.0	0.0
ENG(1)	82.0	79.0	77.1	5.9	9.6	12.4	1.5	1.1	1.2
ALL FSP	82.5	79.9	80.4	6.5	9.7	10.2	1.5	0.7	0.9
Work on Prewriting and Planning									
ESL(33B)	87.9	--	100.0	6.1	--	0.0	3.0	--	0.0
ESL(33C)	81.1	90.0	76.9	5.7	5.0	7.7	0.0	0.0	0.0
ENG(A)	86.1	82.1	86.7	4.6	8.6	5.3	0.0	2.7	1.3
ENG(1)	80.0	80.8	79.1	9.8	5.3	10.9	2.4	1.4	1.9
ALL FSP	82.5	81.6	81.0	7.5	6.4	9.4	1.5	1.8	1.7
Work on Revising									
ESL(33B)	72.7	--	100.0	12.1	--	0.0	3.0	--	0.0
ESL(33C)	81.1	95.0	69.2	9.4	0.0	15.4	0.0	0.0	0.0
ENG(A)	86.1	86.8	74.7	1.9	6.6	14.7	0.0	0.7	2.7
ENG(1)	76.1	91.1	86.8	11.7	2.5	7.0	1.5	1.8	1.2
ALL FSP	79.2	89.8	83.8	8.8	3.8	8.8	1.0	1.3	1.4
Freewriting									
ESL(33B)	3.0	--	16.7	3.0	--	16.7	6.1	--	0.0
ESL(33C)	52.8	30.0	15.4	11.3	0.0	23.1	3.8	0.0	0.0
ENG(A)	63.9	57.6	53.3	6.5	15.2	14.7	1.9	4.6	4.0
ENG(1)	55.6	65.8	60.1	16.1	17.8	13.6	6.8	6.1	3.5
ALL FSP	53.1	61.5	56.3	11.8	16.2	14.2	5.0	5.3	3.4

Note. Percent of "No Answer" and missing data were deleted from tabled amounts. N's for 1983, 1985, and 1986, for each subgroup of students were as follows: ESL-33B (33, not available, 6), ESL-33C (53, 20, 13), ENG-A (108, 151, 75), ENG-1 (205, 281, 258), and ALL FSP (399, 452, 352).

content course and the strong emphasis on writing correct, organized prose, these findings should come as no surprise: Students obviously valued the integration between the language class and the content course.

Table 2 presents student ratings of individual activities in the language component. Five general findings were revealed in the responses: (1) Students' evaluations of the written comments on their papers and class discussions were uniformly high; (2) students gave comparatively low ratings to presentations by other students, perhaps because such presentations were rarely used (a third to a half of the students provided no answer to this item); (3) students' ratings of lectures on grammar, style, etc., declined from 1983 (90.5% of the total found them "helpful") to 1986 (in which 70.5% rated them "helpful"), and their ratings of grammar exercises declined from 1983 to 1986 (79% vs. 52%, respectively, of the students evaluated these exercises as "helpful"); (4) students' ratings of small peer editing groups were mixed, although the majority evaluated these activities as either "helpful" or "so-so"; and (5) in general, students evaluated their writing assignments very positively, with the majority of students evaluating the seven writing activities as helpful in each of the three years. Among these activities, students were most positive about in-class writing, and somewhat more equivocal with respect to freewriting.

Retrospective Program Evaluation. The first part of the questionnaire elicited Bio-data information from the students. Of the 79 students who completed the questionnaire, responses were obtained from students who attended FSP in 1981 (n=10), 1982 (n=25), 1983 (n=30), 1984 (n=5), and 1985 (n=9). Of the 79 ESL students, 25 were enrolled in the lower proficiency course (ESL 33B), 47 in the intermediate ESL course (ESL 33C), and six were enrolled in the native speaker course (English 1). The students had participated in a variety of content courses: Thirty-five had studied Psychology, 18 Political Science, 7 Anthropology, 11 were enrolled in the History section and 1 in Math. Seven students did not specify which content course they had taken. The 79 students represented a cross-section of majors: The majority were declared "hard" science majors, i.e.,

Engineering (14), Math (12), Biology (12), Physics (6), and Chemistry (4). A few of the students had declared social science majors: Economics (10), Sociology (2), Linguistics (2), Political Science (1), Psychology (2); and two students were language majors (Spanish and one Chinese).

The bulk of the questionnaires came from students who were born in Korea (24), Vietnam (17), and Taiwan (12). The rest of the respondents came from other Asian countries such as the Philippines, or Cambodia, and three students were born in South America. Accordingly, Korean was the stated home language of a majority of the students; and 21 of the students spoke a variety of Chinese (including 7 of the Vietnamese students who were ethnic Chinese).

The second part of the questionnaire asked the students to rate certain activities or skills they were exposed to in FSP. They were asked to select from a Likert-type 5-point scale, ranging from NOT USEFUL (value=1) to VERY USEFUL (value=5) corresponding to how they felt these activities prepared them for the courses they took after FSP. Table 3 presents the rankings based on the mean scores of "usefulness" of the academic skills and additional benefits of FSP. It is clear from these results that the former ESL students in FSP valued all activities aimed at easing the adjustment from high school to college. Three of the four most useful activities were the additional benefits of FSP: "Adjusting to UCLA", "Increased self-confidence", and "Ability to use UCLA facilities". "Taking lecture notes" was the highest rated academic skill. Other academic skills such as "Pre-writing strategies", "Proofreading for errors in written work", and "Preparing reading guides and notes" were highly rated.

The third part of the questionnaire requested information on the amount of actual writing the students had to do per quarter. The mean number of in-class essays they wrote per quarter was 2.4; the mean number of take-home papers per quarter was 2.2.

The final section requested open-ended comments about the students' experience in FSP. The open-ended comments were over-whelmingly positive. Three themes stood out among the positive comments: Easing the adjustment; increased self-confidence; and

Table 3

Former Students' Rankings of Usefulness of Skills Learned in FSP

	MEAN SCORE
Academic Skills:	
Taking lecture notes	3.92
Pre-writing strategies	3.71
Proofreading for errors in written work	3.68
Preparing reading guides/notes	3.67
Using rhetorical modes in writing	3.62
"Psyching-out" the professor	3.50
In-class essay exam strategies	3.48
Revising drafts of take-home paper assignments	3.47
Ability to participate in class discussions	3.39
Time management techniques	3.37
Objective test-taking strategies	3.30
Vocabulary development skills	3.12
Oral presentations	2.64
Additional Benefits:	
Adjusting to UCLA	4.12
Increased self-confidence	3.86
Ability to use UCLA facilities	3.85
Ability to use UCLA resources (e.g., counselors)	3.78

Note. Students responded on a 5-point Likert Scale (1 = not useful; 5 = very useful). 79 students completed the survey.

learning how to get help. The following slightly edited comments from the questionnaires illustrate the themes in the students' own words:

A. Ease of adjustment:

"FSP gave me an edge in fall quarter. I knew roughly what to expect from UCLA."

B. Self-confidence:

"I'll say it's 'Increased self-confidence' because I think I didn't realize that I can actually do well in UCLA, until I . . . started to believe that I can do well . . ."

"I grew up more mature after spending 7 weeks in FSP and was very confident to work hard [to] overcome all the barriers."

C. Learning to get help:

"The most important thing that I've learned during my participation in FSP was that professors and the staff are really eager to help the students to assist them in every possible way, if the students ask for help."

"Knowing where to get help, tutoring, and to set aside time to talk to professors. Time management was also a great benefit."

Despite the overall positive tone of the open-ended comments, students had constructive comments to offer to the program's administrators. As exemplified by the quotes below, one main concern was the excess support provided by FSP, which students felt gave them a somewhat false sense of how they would be able to compete at the university. An additional concern expressed by those students majoring in the sciences was the program's focus on the social sciences and humanities.

A. Excess support:

"It was a great confidence builder, which could be both to its advantage and disadvantage. The disadvantage of it could be building too much confidence. It should always be reminded that the summer courses are easier."

"During FSP, I was working closely with friends, tutors, and counselors, but after the real freshman year begins, I was mostly on my own.... I hope that the follow-up can somehow help the students who were discouraged in the competition..."

B. Program focus:

"Because I am a science major, I feel that the skills I learned hardly helped me [in] writing a scientific lab report."

"I also believe FSP can be improve[d] by giving more speech course[s] because for my major [Biology] I had to speak a lot."

Interim Discussion

The student profile which emerged from Study 1 revealed useful information for future program and curricular planning. The predominance of Asian immigrant students enrolled in the program throughout the years came as no surprise; however, the high percentage of science majors, coupled with their dissatisfaction with the program focus, has important implications for the selection of content courses to be offered in FSP. Although no causal connections can be drawn between FSP participation and persistence at the university, it is interesting that the number of students who had withdrawn or who had left for academic reasons was small, and that FSP students overall maintained a respectable GPA.

Concerning the program evaluation, the results confirmed the value of many of the individual components of the FSP language class. Clearly, the efforts made to integrate the teaching of language and content paid off in terms of the students' beliefs that they were better readers and writers as a result of FSP. The relatively low ratings of the study skills and reading activities, to which a weekly average of 4-5 hours was devoted, could possibly be attributed to the students' overestimation of their reading skills and to their lack of awareness of how crucial good study habits are at the university. Finally, the low ratings of peer editing, student oral presentations, and teacher conferencing were not surprising. These activities were ones which freshman students were unaccustomed to or reluctant to take advantage of, and thus not valued as highly as more traditional classroom activities.

The results of the retrospective evaluation by the former ESL students provided strong validation of the overall usefulness of FSP in easing the transition period from high school to the university. They

also confirmed the curricular objectives of FSP, which emphasized the essential academic skills which students would need throughout their university career. The former students valued the majority of the activities of the language component. Another interesting finding concerned the amount of writing the students were required to do each quarter in their regular classes. This finding goes to the heart of a lingering question--namely, how much writing do ESL students (who typically enroll in science majors or who may avoid courses which require a lot of writing) actually do once they complete the required ESL/English courses? The findings indicated that the former FSP students did, in fact, have to write in-class and out-of-class papers in their content classes, thereby validating the specific focus of FSP.

Study 2: FSP Students' Academic Backgrounds and Self-Assessment of Skills

In the second study, students who were enrolled in the lower proficiency courses in the 1986 summer program were surveyed to obtain information regarding their home language background, their prior experience with certain academic skills in high school, and their view of how FSP helped them to improve these skills. The subject pool in this study included the English A students as well as the ESL 33B/C students. Although they may have been schooled entirely in English, many English A students, in fact, did not speak English at home, and were therefore similar in terms of their writing and other academic skills to the ESL students. The research questions for this study were as follows:

1. What is the home language background of the lower proficiency students enrolled in FSP?
2. What exposure to academic skills did these students have in high school?
3. How do these students assess their academic skills at the beginning, middle, and end of the FSP term?

Methodology

Subjects. Subjects for this phase of the study were the lower proficiency students enrolled in FSP during the summer 1986 term. Students were drawn from ESL 33B/Psychology (n=6), ESL 33C/Geography

(n=13), and English A/Geography (n=92). Altogether, the sample consisted of 111 students.

Instruments. Two instruments were developed for Study 2. The first was a survey of the home language background and academic activities the students had been exposed to in high school. In rating their exposure to a specified set of academic activities (e.g., highlighting information in their textbooks, taking lecture notes, working in peer edit groups), the subjects selected from five points on a Likert-type scale, ranging from NEVER (1) to ALWAYS (5). The second instrument, the Self Assessment Scale, was designed to assess the students' degree of confidence on a number of academic skill dimensions as they progressed through the summer term. Students responded on a five-point scale, ranging from POOR (1) to EXCELLENT (5). Examples of items included on this scale were, "Using study time efficiently," "Asking questions in class," and "Knowing how to revise written work."

Procedure. At the beginning of the summer term, 1986, permission was obtained from the FSP administration to administer the survey instruments to the 111 students placed into the lower proficiency courses, ESL 33B/C and English A. All nine ESL and English A instructors consented to participate in the data collection, administering the scales at the beginning, middle, and end of the summer term.

Results

Student Profile. The demographic portion of the high school survey provided, for the first time, home language background information on the students (n = 92) enrolled in English A, a course designed primarily for native speakers of English. Interestingly, 42 (46%) students reported that they spoke another language fluently. Of these 42 students, 33 (78.6%) identified this language as Spanish and 39 (92.9%) said the language was spoken in the home. Seventy-two (78%) students were born in the United States; twenty were born outside the country, with 8 (9%) born in Mexico, 2 (2.2%) in Ethiopia, 2 (2.2%) in Belize, 2 (2.2%) in the Philippines, 1 (1.1%) in Nicaragua, 1 (1.1%) in Guatemala, 1 (1.1%) in Korea, 1 (1.1%) in Japan, and 1 (1.1%) on a U.S. Air Force Base in W. Germany. For English A students born outside of

the United States, their average length of residence in the U.S. was 4.7 years. The native languages of the nineteen (19) ESL students were Korean (7), Chinese (4), Spanish (4), Vietnamese (2), Tagalog (1), and Cambodian (1). None of the ESL students was born in the United States. Their average length of residence was 4.1 years.

Exposure to Academic Skills in High School. The second part of the survey asked the students to rate the frequency with which they were exposed to 24 academic activities in high school. Table 4 displays the results of this section of the high school survey.

"Taking lecture notes" was the activity receiving the highest frequency rating. Students also reported having been exposed to a variety of writing activities in high school. With the exception of compare/contrast essay assignments, however, few students reported having to practice the many other kinds of writing (e.g., argument, classification, process) which studies have found to be most frequently required in college (c.f., Johns, 1981; Kroll, 1979; Ostler, 1980). For example, students reported that they seldom had the opportunity to write essays of definition, process, or classification, and that only sometimes had they been required to write summaries or to argue a point of view. It is also clear from Table 4 that these students had little exposure to reading skill development. They reported only sometimes having taken notes from reading, having highlighted information in their texts, or having employed review reading techniques. Finally, students reported having had almost no opportunity to work in peer edit groups.

Self-Assessment of Academic Skills. Results of the Self-Assessment Scale are reported in Table 5. A one-way analysis of variance compared responses over the three administrations of the Self Assessment Scale. Student Newman Keuls Tests were conducted to pinpoint differences across the three administrations. Findings are presented for the total sample (The "ALL" category) and separately for the ESL and non-ESL groups.

Overall, the ALL category revealed a significant increase in confidence on 11 of the 15 items. For example, over the seven-week term, students demonstrated significantly higher self-ratings at the end of term on Item #2 "Taking organized and readable lecture notes,"

Table 4

Current FSP Student Ranking of Frequency of

Academic Activities in High School

	ITEM	MEAN SCORE
1.	Taking lecture notes	3.7
2.	Out-of-class writing	3.7
3.	Writing drafts	3.7
4.	Revising writing	3.7
5.	In-class writing	3.6
6.	Essay-compare/contrast	3.6
7.	Reviewing notes	3.5
8.	Class discussion	3.4
9.	Taking notes from reading	3.3
10.	Essay-summary	3.2
11.	Essay-argument	3.2
12.	Pair/group work	3.1
13.	Pre-writing activities	3.1
14.	Grammar instruction	3.1
15.	Teacher conferences	3.0
16.	Essay-description	3.0
17.	Review reading	3.0
18.	Highlighting information in text	3.0
19.	Punctuation instruction	2.9
20.	Planning study schedule	2.8
21.	Essay-definition	2.7
22.	Essay-process	2.6
23.	Peer edit group	2.6
24.	Essay-classification	2.4

Note. Students responded on a 5-point Likert Scale (1 = never; 5 = always). 111 students completed the survey.

Table 5

Results of Self-Assessment Scale (Means)

		Administration 1	2	3
1. Getting the essential information when taking lecture notes	ALL	3.5	3.6	3.6
	ENG(A)	3.7	3.6	3.7
	ESL	2.8[b]	3.2[a]	3.2[a]
2. Taking organized and readable lecture notes	ALL	3.3[b]	3.4[ab]	3.5[a]
	ENG(A)	3.4	3.5	3.6
	ESL	2.8	2.9	3.0
3. Keeping up with the reading assignments in the content course	ALL	2.9[b]	2.8[b]	3.1[a]
	ENG(A)	3.0[ab]	2.8[b]	3.2[a]
	ESL	2.7	2.7	2.8
4. Organizing information from reading assignments	ALL	3.1	3.2	3.3
	ENG(A)	3.2	3.2	3.4
	ESL	2.8[b]	3.1[ab]	3.3[a]
5. Remembering what I've read	ALL	3.0[b]	3.1[a]	3.2[a]
	ENG(A)	3.0	3.1	3.2
	ESL	2.8	3.2	3.0
6. Getting started on a content course written assignment	ALL	2.9[b]	3.0[b]	3.3[a]
	ENG(A)	3.0[b]	3.0[b]	3.4[a]
	ESL	2.7[b]	2.9[ab]	3.2[a]
7. Knowing how to organize your ideas on an essay exam	ALL	2.8[b]	2.9[b]	3.2[a]
	ENG(A)	3.0[b]	2.9[b]	3.3[a]
	ESL	2.3[b]	2.9[a]	2.7[ab]
8. Knowing how to organize your ideas in a take-home paper	ALL	3.2[b]	3.2[b]	3.4[a]
	ENG(A)	3.2[b]	3.2[b]	3.5[a]
	ESL	3.0	3.1	3.2
9. Knowing how to revise written work	ALL	3.0[b]	3.1[b]	3.3[a]
	ENG(A)	3.1[b]	3.2[b]	3.5[a]
	ESL	2.5	2.7	2.7
10. Using study time efficiently	ALL	2.9	2.9	3.0
	ENG(A)	3.0	2.9	3.0
	ESL	2.7	2.8	2.8
11. Trying to "psych out" the professor to predict what he/she will emphasize on exam/paper assignments	ALL	2.8[b]	2.8[b]	3.0[a]
	ENG(A)	2.7[b]	2.9[ab]	3.0[a]
	ESL	2.8	2.7	3.0

(Table 5 continued)

12. Proofreading for errors in your written work	ALL	3.1^{a}	2.9^{b}	3.1^{a}
	ENG(A)	3.3^{a}	3.0^{b}	3.3^{a}
	ESL	2.6	2.6	2.6
13. Participating in class discussions	ALL	3.3^{ab}	3.2^{b}	3.4^{a}
	ENG(A)	3.4^{ab}	3.3^{b}	3.5^{a}
	ESL	3.0	3.1	3.1
14. Asking questions in class	ALL	3.0^{b}	3.2^{a}	3.3^{a}
	ENG(A)	3.1^{b}	3.2^{b}	3.4^{a}
	ESL	2.5	2.9	2.8
15. Developing strategies for taking objective exams	ALL	3.0^{b}	3.2^{a}	3.2^{a}
	ENG(A)	3.0^{b}	3.2^{a}	3.3^{a}
	ESL	3.0	3.1	2.9

Note. N's for the three groups were: ALL (111), ENG A (92), and ESL (19). Means with different superscripts are significantly different at the .05 level on the basis of non-independent t-tests.

Item #9 "Knowing how to revise written work," and Item #15 "Developing strategies for taking objective exams." Looking at the ESL students separately, fewer significant changes occurred over the term, although the ratings tended to be generally higher as well. Four items yielded significant differences for the ESL students: Item #1 "Getting the essential information when taking lecture notes;" Item #4 "Organizing information from reading assignments;" Item #6 "Getting started on a breadth course assignment;" and Item #7 "Knowing how to organize ideas on an essay exam." In the case of Item #7, the ESL students' ratings decreased from the second to the third administration. Similarly, the ESL students reversed their ratings on Item #15, giving themselves higher ratings at the beginning and middle of the term than at the end. Note that Item #10, "Using studying time efficiently," was the only item which did not show a significant improvement for either the ESL or English A students.

Two specific patterns emerged from the data: Students self-reported the most improvement on the various activities associated with writing, for example, organizing ideas and revising written work; they reported the least improvement on activities related to study skill development, for instance, organizing reading material, and getting essential information from lectures.

Interim Discussion

It is clear from the results of the Self-Assessment Scale that the students generally felt that they improved their academic skills during FSP. Thus, the focus in the FSP curriculum on writing skills was reflected in the self-reported improvement on the various items pertaining to these skills. In contrast, the emphasis on study skills does not appear to have been as productive in terms of student opinion. Several explanations are possible in this regard. First, seven weeks is a very short time to alter established study practices, and though students may have learned in theory how to better prepare themselves, they may not have been able to put the suggested study strategies into practice. Additionally, improving study habits may have been a less salient activity than the more tangible and immediate need to produce written products. Finally, actual environmental influences may have mitigated against their improvement in this area. Since many of these

students were living away from home for the first time, the freedom of their new living environment may have overwhelmed them, and the many social opportunities afforded by this living environment may have diverted them from studying.

In an additional analysis not reported in detail here, a multiple linear regression analysis was conducted using the responses on each of the three administrations of the Self-Assessment Scale and the final grades in the content and language courses. Four skills emerged as the best predictors of the final course grades in Psychology and in the English course: Revising writing, proofing written work, participating in class discussions, and using study time efficiently. These findings confirm the emphasis of the FSP curriculum on helping students acquire the essential writing and study skills for doing well in school. Further, despite student opinion to the contrary, these findings provide empirical validation for the importance of study skills in academic success.

Study 3: ESL Student Follow-up

The third study involved an intensive follow-up of ESL students who had participated in the 1986 summer program. It consisted of a series of interviews and the administration of a simulated final exam. The research questions were:

(1) How do the former ESL students in FSP adjust to UCLA during the regular year?

(2) How do the former ESL participants in FSP compare to the ESL students who did not participate in the program in terms of English proficiency and academic skills?

Methodology

Subjects. Subjects for the first part of the study consisted of 12 students from the 1986 program. These students were selected in equal numbers from both levels of ESL (33B and 33C). The native languages of the twelve (12) students were Spanish (3), Korean (3), Cambodian (2), Chinese (2), Vietnamese (1), and Tagalog (1). A comparison group was composed of 15 ESL students who were enrolled in an ESL 33C class in the fall of 1986. In this group, the languages spoken were Chinese (7) Korean (4), Armenian (2), Spanish (2), and Vietnamese

(1). Permission was obtained from the ESL Section at UCLA to test the students during regular class time on the grounds that the simulated final exam provided good practice in test-taking.

Instruments. Two instruments were designed for Study 3. The first was a structured interview administered to the former FSP participants. The interview consisted of a set of questions pertaining to the academic problems these students were experiencing during fall quarter, and their assessment of how FSP had helped prepare them to cope with the realities of study at the university. In addition to the structured questions, other more extemporaneous questions arose regarding issues which evolved during the interviews.

As additional support for the self-report data, a second instrument, a simulated final exam, was developed to quantitatively assess the extent to which these students had been prepared for the academic demands of the university. The objective was to present students with an academic task which they were likely to encounter across the curriculum at the university, not one which resembled a typical second language proficiency exam. A second objective was to construct the type of task which reflected the orientation of the adjunct model, that is, an exam that could assess the students' ability to integrate language and content.

The simulated final exam designed for this purpose consisted of the following components: (1) a selection from an audiotaped university lecture (approximately eight minutes in length); (2) an excerpt from a university textbook; (3) objective questions and short-answer definitions which drew on the lecture and reading selections; and (4) a short essay exam question requiring students to synthesize information from both the lecture and reading passages. The lecture was taken from Young and Fitzgerald (1982), an academic ESL listening series; the reading passage was drawn from American Politics by Dolbeare and Edelman (1981), a college-level text of the type used in introductory Political Science courses. Both the lecture and the reading were slightly edited to increase coherence; however, every attempt was made to preserve the authenticity of the passages. The topic, "political elites", was selected because it was felt that the students would have minimal familiarity with it.

Procedure. The structured one-hour interviews were conducted with each of the twelve former FSP students during weeks 3, 6, and 10 of the fall quarter. The interviewer took notes, and later summarized them for coding. The interview procedure was greatly facilitated by the fact that the interviewer had served during the summer as the students' ESL tutor. Thus, he had already established a close rapport with the students, was familiar with their individual study habits, and was able to more easily elicit pertinent information in the interviews.

The simulated final examination in political science was administered to the twelve FSP students and to the comparison group in the fall quarter of 1986. The objective section was marked by the researchers. The essays were blind-rated by three experienced composition instructors using a composition rating scale (Jacobs et al., 1981) with which all three raters were familiar. A norming session was conducted using four student essays selected by the researchers as exemplifying a range of proficiency levels and containing a variety of structural and discourse problems. Spearman correlation coefficients were computed to determine inter-rater reliability. The inter-rater reliability of three composition raters was .64, .65, and .74.

Results

Interviews with FSP Students. The most relevant issues raised during the structured interviews fell into the following five categories: 1) Students' impressions of the fall ESL/English courses in which they were enrolled; 2) their assessment of their study skills in fall quarter; 3) their ability to participate in class discussions; 4) their ability to cope with the writing tasks faced in the fall quarter; and 5) the degree to which they felt FSP had prepared them for the regular school year.

Concerning the first issue, where the students compared their fall ESL/English class (a more traditional English language skills course) with the summer adjunct-model course, none of the students interviewed addressed this issue directly. However, they noted that the fall course was far less intensive, and commented that they had received less individualized attention. They also noted the greater diversity of students enrolled in these classes--specifically upper-class and

graduate students--with whom they had to compete. Those students enrolled in English 3 reported the additional pressure of competing with native English speakers.

Regarding the study skills issue, an overwhelming majority of the students commented that FSP helped them to achieve success in time management, lecture note taking, and reading. Several commented that FSP had helped make them wise to the "system." Especially in the first interview, students appeared quite confident of their note taking and reading skills. However, in the second interview, which occurred after midterm exams, there was a noticeable breakdown in confidence regarding these skills, as well as an awareness among the students that their time management skills were still weak. Specifically, students noted difficulties in picking out major points in lectures, and expressed surprise that so much of the midterm exam material was drawn from lectures. Many admitted that after midterm exams they had resorted to buying the lecture notes available through the university's note taking service.

The question concerning students' ability to participate in class discussions met with mixed reactions from students. On the one hand, students noted that the small class size and amount of individual attention was a great confidence builder, and that this had made them less nervous about participating in class discussions. As one student noted, "After FSP, teachers seem like normal human beings." However, counteracting this tendency was the fact that many students were enrolled in mathematics or science classes in which participation was not encouraged, and the fact that the presence of graduate students in some of their classes diminished some of the confidence that students had initially felt.

The enrollment of many of these students in mathematics or science courses also played a role in students' answers concerning the writing tasks they encountered in fall quarter. Since the summer courses were constructed to emphasize writing in both the language and content components, it was almost inevitable that all students would note a decreased emphasis on writing during the fall term. This was especially true of the mathematics and science students. Nonetheless, students reported a variety of writing assignments in their content

courses, and almost all noted that they felt better able to cope with these as a result of FSP. In terms of the English classes in which these students were enrolled in fall term, they almost universally felt that not enough "intensive" writing was being required. Overall, despite the boost that students felt they had received in FSP, they appeared very aware that they had a number of residual writing problems, particularly in the areas of grammar and organization.

Finally, concerning the degree to which FSP had prepared them for the regular session, students felt that FSP had "pretty much covered everything" they needed in order to face the academic demands of the university. However, they complained that, due to the network of support services in FSP, they had been inadequately prepared to face the more bureaucratic demands of the university, such as registration and bookstore lines, parking difficulties, and financial aid "hassles."

Simulated Final Examination. Before proceeding to the results of the simulated examination, we should note that the term "comparison group" to refer to the non-FSP students should be employed with caution, as a number of disparities existed between the two groups. First, since FSP is funded through the university's Affirmative Action Program (AAP), most of the FSP students qualify as AAP students. Second, by definition, all FSP students are entering freshmen. This was not the case with the non-FSP group, although the majority were freshmen, all were undergraduates, and all had been placed into ESL 33C via the fall placement examination. Finally, because of the heterogeneity of ESL students enrolled in the 1986 FSP, the proficiency range of these students was quite large compared to that of the non-FSP students.

Table 6 presents the results of the simulated final examination. Analyses of the test scores using a Wilcoxon Matched Pairs Sign-rank test revealed significant differences between the FSP and non-FSP groups on English language proficiency ($z=2.11$, $df=1$, $p < .05$). In other words, the ESL students in FSP had significantly lower placement scores than the non-FSP ESL students. There were no significant differences in performance between the two groups on either the objective or essay portions of the simulated examination. Thus, although the FSP students in this study had lower English placement

Table 6

FSP vs. Non-FSP Students on Simulated Final Exam:

Means (and Standard Deviations)

	FSP	Non-FSP	z	Signif.
ESLPE	90.8 (11.9)	99.4 (13.5)	2.11	$p < .05$
OBJECTIVE	25.4 (5.4)	26.1 (7.8)	.63	n.s.
ESSAY	66.5 (13.3)	67.2 (16.3)	.42	n.s.

Note. Significance testing was by the Wilcoxon Matched Pairs Sign-rank Test. N's were 12 (FSP) and 15 (Non-FSP). ESLPE refers to the UCLA English as Second Language Placement Exam.

scores, they performed as well as the non-FSP students on an exam which tested listening and reading comprehension and required the higher order thinking skills of synthesis and evaluation in the composition of the essay.

Interim Discussion

The data from these structured interviews provided additional evidence of the beneficial effects of FSP in helping to prepare students to cope with college-level work. Of particular interest were the students' comments concerning the rigorous nature of the FSP English course, which the students realized more in retrospect. Apparently, not only did students feel that FSP had prepared them academically for the regular school year, but also in other ways, such as helping them to become wise to the system. This was a rewarding finding, since it validates the entire fabric of FSP, with its strong network of counseling and tutorial services in addition to the academic component. The students' reports of little opportunity to participate in class discussions reinforced FSP's emphasis on reading and writing skills since such discussions are rare in a large university.

The results of the simulated final exam provided evidence that the FSP instructional model was an appropriate one for students who come to the university with weak language and academic skills. It is gratifying to note that despite the FSP students' significantly lower ESL placement scores, they were able to compete with their other ESL counterparts on a task requiring them to use the kinds of academic skills which are crucial for success at the university. This is especially true of the FSP students' essay results, which was the most powerful indicator of their academic improvement.

A final note regarding the essay rating procedures is perhaps in order. The inter-rater reliability of the essay portion of the final exam was somewhat disappointing. In retrospect, we believe that our choice of the Jacobs et al. (1981) scale was perhaps not the most appropriate, as the raters experienced difficulties coming to terms with such issues as how to deal quantitatively with the amount of the original source text used (i.e., not correctly paraphrased) and how to take into account the degree to which the information from the two sources had been synthesized. As suggested by Cruikshank and Sullivan-

Tuncan (1987), the Jacobs et al. (1981) scale is designed to assess non- content-based essays, i.e., essays which do not require students to synthesize source materials such as reading passages or text materials. Clearly, there is a need for a composition rating scale to be developed which takes into account how effectively students are able to integrate source texts into their own writing.

Discussion and Conclusion

The adjunct model of language instruction provides a sound pedagogical framework for introducing underprepared students to the academic demands of the university. With the focus in the ESL class on essential modes of academic writing, academic reading, study skill development, and the treatment of persistent structural errors, students are trained to cope with assignments in the summer content course; and more importantly, they are prepared for courses during the regular school year. Indeed, the adjunct model, as exemplified by the UCLA Freshman Summer Program, constitutes an ideal framework for integrating language and content teaching in the university context and for preparing students to write effectively across the curriculum.

The activities of the content-based language course are geared to stimulate students to think and learn in the target language by requiring them to synthesize information from the content-area lectures and readings. Since these materials provide authentic content for students to discuss and write about, the adjunct model provides a context for integrating the four traditional language skills. Furthermore, the pedagogical organization of the model offers ESL students a critical, but often neglected option. It gives them access to native-speaker interaction and the authentic, unsimplified language of academic texts and lectures in the content course, yet enables them to benefit from sheltered ESL instruction in the language where their particular linguistic needs can be met.

An underlying assumption of this pedagogical framework is that student motivation in the language class will increase in direct proportion to the relevance of its activities, and, in turn, student success in the content course will reflect the carefully coordinated efforts of this team approach. The program evaluation findings and

student self-reports appear to validate this assumption: The former students reported that they felt they were better readers and writers as a result of FSP. Moreover, results from the comparison study indicated that the FSP students were able to perform on par with their non-FSP peers despite lower English language placement scores. In sum, the data collected in this series of studies provide a detailed description of the adjunct model and a first attempt to document the effectiveness of FSP in preparing underprepared ESL students for the demands of university study.

From an instructor's point of view, the adjunct model offers multiple strengths. The most immediately evident of these is the efficacy of its pedagogical framework in an academic setting. In addition to this, there are a number of other attractive features of the model. Among these is the student population itself, which is more homogeneous and more uniformly motivated than the traditional ESL class. In addition, by expanding the dynamics of teaching to include general academic preparation as well as language instruction, the model offers ESL teachers a more broadly defined domain of teaching and the opportunity to be truly involved in preparing students for actual university study. Thus, the essence of the adjunct model's appeal to instructors involves the following: the rewards of working within a sound pedagogical framework; the challenge of materials development and coordination responsibilities; the insights gained by direct involvement with the academic demands placed on students; and the opportunity to share in the students' content course successes and failures.

Clearly, the adjunct model offers multiple pedagogical strengths; however, there are a number of factors limiting its applicability. For instance, since the model depends on the availability of content course offerings, a full-blown adjunct model is probably not feasible at an intensive language institute. Further, as we have described it, adjunct instruction assumes that students can cope (with assistance from the language and content staff) with the authentic readings and lectures in the content course. Thus, the model is not applicable to beginning proficiency levels. Next, the model requires an administration willing to fund the large network of instructors and

staff which the program necessitates; and a strong commitment of time and energy on the part of the language and content teachers to integrate the content materials with the language teaching aims. This strong coordinating effort behind the model may not be possible in all settings. Finally, more than anything else, the adjunct model rests on the strength of its central administration and the effectiveness of the various coordination meetings held before and during the term. In cases where these conditions cannot be met, the implementation of the model will be severely hampered.

Despite these limitations, the adjunct model can be adapted to fit other institutional settings and populations. As evidence of this, adjunct programs such as FSP at UCLA or modified adjuncts--i.e., language workshops attached to a content course--currently exist both here and abroad: with undergraduate international students studying Human Geography at Macalester College in St. Paul, Minnesota (Peterson, 1985); graduate students in Pharmacy (Seal, 1985) and Business Law (Snow & Brinton, 1984) at the University of Southern California; foreign students studying the Philosophy of Science (Jonas & Li, 1983), American History and Economics (Spencer, 1986) in the People's Republic of China; and francophone and anglophone students at the bilingual University of Ottawa who are learning English and French through such subject-matter courses as Psychology and History (Wesche, 1985).

Overall, this study has far-reaching implications for educational planning and policy. First, the current movement in second language education at all levels of instruction (elementary through higher education) is toward content-based approaches. This descriptive study documents the effectiveness of one type of content-based program, the adjunct model. A second major policy implication concerns the multi-cultural reality of education in the United States, particularly in large urban areas with burgeoning populations of limited English proficient students. As documented by this study, the adjunct model holds great promise as a viable approach for assisting these types of students to succeed in a university setting.

This study is a first attempt to document the adjunct model of FSP. Clearly, more comprehensive, controlled research is called for. Three possible directions are suggested. Longitudinal study of the

participating students over a four-year period would yield important information about student academic success and persistence at the university. Second, more convincing evidence of the effectiveness of the model could be established by designing more rigorous research studies. One such study might involve a design in which an instrument, such as the simulated final examination developed for this study, is administered at the beginning and end of the term to measure student progress. Finally, with the increasing implementation of content-based programs, a concomitant need arises to develop assessment instruments which better reflect the curricular objectives of these kinds of programs.

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ABOUT THE AUTHORS

Marguerite Ann Snow (Ph.D. in Applied Linguistics, University of California, Los Angeles, 1985) was formally a member of the professional staff of the Center for Language Education and Research at UCLA and is now a Visiting Assistant Professor in the TESL/Applied Linguistics Department at UCLA. Her main areas of interest are immersion language education, foreign language attrition, and ESL teaching methodology.

Donna M. Brinton is a Lecturer in TESL/Applied Linguistics at UCLA, and serves as the ESL Media Supervisor for the department. Her main areas of interest are content-based instruction, materials development, and the use of instructional media in language teaching.